

LAND USE

MURDER
UNDER THE
MICROSCOPE



These activities will give you and your group some valuable information which might help you when solving the crime.

Look for and collect articles relating to land use. These might show how widespread and serious land use issues can be.

How do we use the land?



Brainstorm a list of things that humans do to make use of the land.

These pictures will help:



[Waihi Opencast
Gold Mine - 2010](#)

[Gurney](#)

[CC BY 2.0](#)

When you have made your list, categorise the uses under these headings:

Urbanisation

Agriculture

Forestry

Mining

Recreation

Research



What does each land use activity involve?

Choose one of the categories from the previous activity. Using the internet, newspapers and other sources of information find out about more about the land use involved. For example, if you were investigating urbanisation you may have a list that looks like the one below.

Urbanisation

- Houses
- Factories
- Roads
- Schools
- Shopping centres
- Sports grounds
- Sewage treatment



Try to think of more things we do when we urbanise. Add these to your list.

Choose one item on the list and draw up a consequences chart to show what effect the activity might have on our waterways. Here's an example:

Building a house

- Clear the land of trees and grass
- Lay foundations
- Bring in building materials including concrete
- Lay pipes for sewage and drainage
- Build house
- Build swimming pool
- Plant garden



Consequences

- Exposed soil washes away during rain → erosion
- Foundations and pool cover ground → fewer places for stormwater to escape
- Pipes take some stormwater → less water going into soil
- Fewer mature trees → water table changed

When you have completed your consequences chart, share it with those in your group.

What about waterways?



[Wakeboarding](#)

[ColmSurf](#)

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Here are two ways that humans use the waterways. Think and make notes about the other ways that humans use the waterways for recreation, for living and for transport. What effect would these uses of the waterways have?

Choose one use and describe in a paragraph how that use will affect the waterways.

Research

Are there any solutions to the problems we create?



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There are ways we can minimise the effect we have on the waterways. This picture shows a sewage treatment plant which is reducing the amount of nutrient reaching a waterway. Using the internet, newspapers and other sources of information find other ways we can reduce our impact on the waterways.

Activities



Be prepared! You will need to spend time collecting the materials required for the following experiments.

This activity appears on the Queensland Government Natural Resources and Water website.

Demonstration of raindrop splash on bare soil

http://www.derm.qld.gov.au/education/teachers/land/resources/land_resource_sheet_01.pdf

The Ipswich City Council website has the following activities:

A Catchment Story

http://www.ipswich.qld.gov.au/documents/environment/activity_sheet_7_a_catchment_story.pdf

Land uses within Catchments

http://www.ipswich.qld.gov.au/documents/environment/activity_sheet_4_land_uses_within_catchments.pdf

http://www.ipswich.qld.gov.au/documents/environment/activity_sheet_7_a_catchment_story.pdf

Sharing information



What have you found out that might help you understand the crime? Share this information with the other groups.

Find a way to explain how our land use affects our waterways. You could use labelled diagrams to help you.